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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,725	08/13/2001	Randy E. Dewhirst	D-2550A/WOD	7156 —
7590	10/20/2004		EXAMINER	
William O'Driscoll - 12-1 The Trane Company 3600 Pammel Creek Road La Crosse, WI 54601			FLANDRO, RYAN M	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	09/928,725	Applicant(s)	DEWHIRST ET AL.
Examiner	Ryan M Flandro	Art Unit	3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 July 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 34-59 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 34-59 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 20 February 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Priority

2. Applicant's amendment has complied with the conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120.

Specification

3. The objections to the disclosure set forth in the previous Office action (mailed 9/10/02) are withdrawn.

Drawings

4. In light of Applicant's arguments and amendment to the drawings, the examiner withdraws the objections set forth in the previous Office action.

Claim Objections

5. The objection to claim 43 is withdrawn in view of Applicant's amendment.
6. Claims 34-59 are objected to because the recitation of the phrase "such as" in claims 34, 42 and 51 makes the claims unclear as to whether the limitations following the phrase are part of the claimed invention (i.e., must the tension providing device be a spring). See e.g. MPEP

§ 2173.05(d). Furthermore, although claim 42 does not include the word “such” in lines 2-3, the Examiner understands this to be an inadvertent omission and has accordingly read the word into the claim in line 3 following the word “device” for grammatical correctness.

Claim Rejections - 35 USC § 112

7. The rejections set forth in the previous Office action under 35 USC 112, 1st and 2nd paragraphs have been overcome by Applicant’s amendment.

8. Claims 38, 39, 55 and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 35 recites that the “abutment is sized to control the axial load on an expensor when the expensor is located radially outward of the abutment.” The Examiner cannot determine whether the expensor is the same as, or different from, the tension providing device recited in claim 34. It would appear that the expensor is the same as the tension providing device and that claim 38 merely limits the location of the tension providing device to be located radially outward of the abutment. For purposes of examination, the Examiner has read the claim in this way.

Claim Rejections - 35 USC § 102

9. Claims 34-44, 51-53, 55, 56 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Kochendorfer et al (US 4,335,586) (Kochendorfer).

- a. Claim 34. Kochendorfer shows a spacer body **12 or 110** for engaging a tension providing device such as a spring **19** comprising a front face having an aerodynamic contour (see figure 2) symmetrically arranged about an axis; a rear face axially spaced from the front face; a recessed spring bearing surface **18** in the rear face for receiving the tension providing device **19**; a cylindrical spring spacing abutment (see figure 2 – outer annular ring of member **12 or 110**; or see figure 4 – inner annular ring **7**) projecting in an axial direction from the bearing surface **18** and having an axial dimension controlling the deflection of the tension providing device **19**; and a central bore (see figures 1-2).
- b. Claim 35, as best understood. Kochendorfer further shows the front face of the spacer body **12 or 110** as continuous from a radial extremity of the front face to the axis (see figures 1, 2 and 4).
- c. Claim 36. Kochendorfer further shows the abutment with at least one shoulder (see again figures 2 or 4 – outer and inner annular rings of member **12 or 110**).
- d. Claim 37. Kochendorfer further shows the front face of the spacer body **12 or 110** includes a recess (hole therethrough – see figure 1).
- e. Claim 38. Kochendorfer further shows and discloses the abutment (here see figure 4 – inner annular ring **7**) being sized to control the axial load on an expander **19** when the expander **19** is located radially outward of the abutment **7** (see figure 4).
- f. Claim 39. Kochendorfer further shows a second recess (see figure 4 – recessed area inside annular ring **7**).
- g. Claim 40. Kochendorfer further shows the abutment including a first shoulder radially spaced from the axis (see figure 4 – outer annular ring of member **12 or 110**).

- h. Claim 41. Kochendorfer further shows the abutment including a second shoulder 7 located proximal the axis (see figure 4 – inner annular ring 7).
- i. Claim 42, as best understood. Kochendorfer shows and discloses a spacer **110** comprising a contoured spacer body **110** symmetrical about an axis and including a front surface and a rear surface; the front surface including a contoured surface at an angle or curve relative to the axis; the rear surface including a cylindrical spring spacing abutment (see figure 4 – outer annular ring of member **110**) including a washer contact surface (axial end of the annular ring) at an end of the abutment wherein the spring spacing abutment is axially dimensioned relative to the axis so that a spacer assembly **19** used in conjunction with the abutment defects at a desired amount (figure 4).
- j. Claim 43. Kochendorfer further shows the contoured spacer body **12 or 110** including a center portion having a first recess arranged in the rear surface about the spring spacing abutment (see figures 2 and 4).
- k. Claim 44. Kochendorfer further shows a central bore running through the center portion symmetrical about the axis (see figures 1, 2 and 4).
- l. Claim 51. Kochendorfer shows and discloses a contoured spacer body **12 or 110** including a domed front end and a rear surface where the spacer **12 or 110** is symmetrical about an axis; the domed front end including a front face, a rear face, a cylindrical spring spacing abutment (see figures 2 and 4 – inner or outer annular rings of spacer **12 or 110**) having an axial dimension sized to deflect the tension providing device **19** a desired amount, and a recess spring bearing surface **18** in the rear face for receiving the tension providing device **19** (see figures 1, 2 and 4).

m. Claim 52. Kochendorfer further shows the front face including a recess (see figure 1 – hole therethrough) and the rear face includes a fastener 1 projecting in an axial direction (see figures 2 and 4).

n. Claim 53. Kochendorfer further shows the front face providing a continuous aerodynamic surface (see figures 1, 2 and 4).

o. Claim 55. Kochendorfer further shows that the expander 19 includes a spacer assembly (see figures 1, 2, and 4).

p. Claim 56. Kochendorfer further shows that the spacer assembly includes a spring 19.

q. Claim 58. Kochendorfer further shows that the spacer assembly includes a spring 19 contacting the spring spacing abutment (see figures 2 and 4).

10. Claim 34-36, 40, 42-44, 47-48, 51, 53, 58 and 59 are also rejected under 35 U.S.C. 102(b) as being *clearly* anticipated by Kiekhaefer (US 2,605,850). See figures 1 and 2 and the accompanying text in the written disclosure.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 34-59 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,290,467 because they recite the same subject matter regarding the spacer body. Although the conflicting claims are not identical, they are not patentably distinct from each other. Furthermore, although the instant application is a divisional of the '467 patent, the prohibition on double patenting rejections under 35 USC 121 does not apply where the divisional application was voluntarily filed by the applicant and not in response to an Office requirement for restriction. See MPEP §804.01.

Response to Arguments

13. Applicant's arguments with respect to claims 34-54 have been considered but are moot in view of the new ground(s) of rejection which were necessitated by Applicant's amendments to the claims (see amendment submitted 7/16/04). All other issues are believed to have been addressed above.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Specifically, Applicant's amendment submitted 7/16/04 added language to at least the independent claims that changed the scope thereof. Accordingly, **THIS ACTION IS**

MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to impeller spacer assemblies:

U.S. Patent 6,663,343 to Anderson (lacks tension providing device)

U.S. Patent 4,606,698 to Clausen et al (see figures 3 and 7, especially elements 34, 66 and 68)

U.S. Patent 4,242,039 to Villard et al (see element 31 in figure 1)

U.S. Patent 3,981,610 to Ernst et al (see figures 1-2)

U.S. Patent 3,612,719 to Nomura (see figures 1-6)

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952. The examiner can normally be reached on 9:00am- 6:00pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMF
October 13, 2004



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